

## Professional contribution of primary health care for assisted self care to patients with tuberculosis

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## Contribuição dos profissionais da atenção primária à saúde para o autocuidado apoiado aos portadores de tuberculose

Professional contribution of primary health care for assisted self care to patients with tuberculosis

Contribución profesional de atención primaria de salud para el cuidado de uno mismo asistida para pacientes con tuberculosis

Este artigo foi resultado do Trabalho de Conclusão de Curso: Contribuição dos Profissionais da Atenção Primária à Saúde para o autocuidado apoiado aos portadores de tuberculose, 2014, Universidade Federal do Rio Grande do Norte (UFRN).

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### ABSTRACT

**Objective:** to verify the contribution of professional Primary Health Care (PHC) supported self-care to patients with active tuberculosis (TB). **Methods:** quantitative study, cross-sectional conducted with 100 phc practitioners in the city of Natal /RN. We used structured instruments to collect data. **Results:** 80% of interviews were answered by family health unit professional's; 41% worked in the unit for more than 10 years; 44% reported great capacity for bonding and health education; 55% rated the care as reasonable. **Conclusion:** we feel the need to meet the patient holistically, addressing their individual social aspects and considering the health services in order to strengthen the bond between patient and professional service.

**Descriptors:** tuberculosis; self-care; primary health care.

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## RESUMO

**Objetivo:** verificar a contribuição dos profissionais da Atenção Primária à Saúde (APS) no autocuidado apoiado aos portadores de tuberculose (TB). **Métodos:** estudo quantitativo, corte transversal realizado com 100 profissionais da APS no município de Natal/RN. Utilizou-se para coleta de dados instrumento estruturado. **Resultados:** 80% das entrevistas foram respondidas por profissionais de Unidade de Saúde da Família; 41% trabalhavam na unidade há mais de 10 anos; 44% relataram capacidade ótima para o vínculo e educação em saúde; 55% classificou o acolhimento como razoável. **Conclusão:** percebe-se a necessidade de atender o doente de forma integral, abordando seus aspectos individuais, sociais e considerando os serviços de saúde de maneira a fortalecer o vínculo entre doente, profissional e serviço.

**Descritores:** tuberculose; autocuidado; atenção primária à saúde.

## RESUMEN

**Objetivo:** verificar la contribución de la Atención Primaria de Salud profesional (APS) apoyó el autocuidado de los pacientes con tuberculosis activa (TB). **Métodos:** estudio cuantitativo, transversal realizado con 100 profesionales de atención primaria en la ciudad de Natal / RN. se utilizó para recopilar datos de los instrumentos estructurados. **Resultados:** el 80% de las entrevistas fueron contestadas por profesionales de la unidad de salud de la familia; 41% trabajaba en la unidad durante más de 10 años; 44% informó de una gran capacidad para la educación de unión y de la salud; 55% calificó el cuidado razonable. **Conclusión:** sentimos la necesidad de cumplir con el paciente de manera integral, abordando sus aspectos individuales, sociales y teniendo en cuenta los servicios de salud con el fin de fortalecer el vínculo entre el paciente y el servicio profesional.

**Descriptores:** tuberculosis; autocuidado; atención primaria de salud.

## INTRODUCTION

Tuberculosis (TB) remains a major public health problem in developing countries. A third of the world's population is infected with the *Bacillus* that causes the disease, *Mycobacterium tuberculosis*. Annually are 9.27 million new cases (25000 cases/day), and 80% of cases in 22 countries. With 2 million deaths a year (with 500,000 HIV positive). Brazil occupies the 19th place, with prevalence in the country estimated at 58 cases/100,000 inhabitants, with 100,000 new cases annually.<sup>1</sup>

The follow-up of patients with TB requires constant attention, because of this, since 1998 it's adopted in Brazil the Short Term Directly Observation Treatment (STDOT), which increased the detection rate of new TB cases in 18%, increasing treatment success. The elements of the STDOT strategy, currently more decentralized and integrated in Primary health care (PHC) is composed of five components in accordance with the recommendations of the World Health Organization (who), they are: political will; case detection by smear in patients with respiratory symptoms; regular and uninterrupted supply of medicines with standardized treatment regimens; system registry and notification of cases which allow the dynamic monitoring

of treatment outcomes of each patient and the National Tuberculosis Control Programme (POLICY) and directly observed treatment (DOT).<sup>2</sup>

The DOT encourages patient compliance to treatment, reducing the risk of disease transmission in the community for the same discharge for cure. It is a treatment based on direct observation of the taking of drugs with at least three points per week in the first two months, and a note a week until the end of the treatment. Being indicated in the following situations: drinking, substance abuse, retreatment cases after abandonment, homelessness, prisoners, unemployed, people in institutionalized care (nursing homes and asylums) and carriers of the human immunodeficiency Virus (HIV). What demonstrates an effective strategy that reduces the percentage of drop-out rates.<sup>3</sup>

One of the ways to lead the TB carrier to perform the treatment is through supported self-care, a way to help these patients and their families to cope with the challenges of living and treating the disease, in addition to reducing the complications and symptoms.<sup>4</sup>

health self-care involves individual measures related to the protection of the physical, mental and social well-being. When considering that the individuals with TB have a health condition that requires permanent care for maintaining their quality of life, it is necessary to develop abilities of self-care in order to prevent the falling of the disease.<sup>5</sup>

Among the health care is essential to self-care for allowing health promotion actions that people be assisted with information regarding their condition, the signs and symptoms presented by the pathology and how to give themselves with the recommended treatment. The deployment of its actions promotes a partnership between nurse, individual and family being the primary educational process.<sup>6</sup>

The educational process between the learner and the educator is responsible for increasing the autonomy of patients. The qualification as to decision-making regarding their treatment, helps to turn them into his own disease Manager making them more responsible.<sup>7</sup>

The factors involving the abandonment to the treatment are considered complex for including user-related features as well as the own organization of health care. There fore, the media in health education is critical, since, the nurse can assist the individual to prepare to be the agent of your self-care.

Based on this context, this study has the following guiding question: what are the activities and actions of health professionals/or the APS related to self-care for people with TB?

With visas to answer this question, the work aims to verify the contribution of primary health care professionals in self-care supported users in treatment with TB.

## METHODS

Quantitative research of cross-cutting held in Natal-RN, priority for TB control in the State. Integrates of the multicenter project developed in the municipalities of Foz do Iguaçu, São José do Rio Preto, Ribeirão Preto, Natal, João Pessoa and Uberaba. The municipality of Natal presents an estimated population of 853,928 inhabitants.<sup>8</sup> is divided geographically into 36 districts, distributed in five Health Districts (DS): North I and II, South, East and West.<sup>9</sup> The APS is organized through Health services, 60 of these, 37 are family health units (USF) and 23 basic health units (UBS).

About TB in the municipality of Natal, in the year 2010 were notified 385 new cases of TB incidence coefficient by 100 1000 inhabitants was of 47.90, fatality rate of 2.85%, 59.22% cure rate of 6.49% abandonment, 11 deaths being 2.86% for TB and 2.60% for other causes.<sup>10</sup>

In 2012, 1272 reported cases were obtained in the municipality of Natal, 247 cases were infectious, 438 smears performed for diagnosis, 433 contacts examined, DOT coverage rate of 25.6% (n = 124), 62 deaths registered, 124 TB/HIV deaths and 20 cases of TB Multidrug Resistant -TBMDR.<sup>11</sup>

The studied population was composed of 384 basic network health professionals and the sample was random considering the parameters: sampling error of 0.05, 95% confidence interval and P (population proportion) of 50%, the minimum sample of professionals (n = 100). For the calculation of the sample of health professionals to be interviewed raised the number of APS, network professionals in the Municipal Health Secretariat. It was used as inclusion criteria: professionals of the APS that have followed cases of TB and not professionals operating in the exclusion period of data collection, that had accompanied the carriers of TB during treatment and who did not accept to sign an informed consent (TFCC).

A structured questionnaire was proposed by MacCoolInstitute for Health Care Innovation. Adapted and validated in Brazil by Robson ST: Kusma SZ and ShwabGL, for evaluation by professionals of local institutional capacity to develop the model of attention to chronic conditions.<sup>4</sup>

The period of collection occurred November 2013 to January 2014. The questionnaire was applied with four professionals in each health unit, by category (doctor, nurse, nursing and community health agent). In the event of rejection of any professional category the instrument was applied to other categories so that totalizes 04 by health unit. The professionals who agreed to participate were approached by researchers who explained the research and the objectives of the study, by signing the FICS.

Adapted to the attention to TB the instrument was divided into seven dimensions being the dimension III (supported self-care) the focus of this study. This dimension had as components: registries related to support of the professionals of the Health Unit for TB carrier take care of

own health; support (health education and establishing ties with the professionals); the kind of concerns of patients with TB and their families and interventions of behavior change (quitting smoking, drinking, using drugs). The answers were divided into four levels (D, C, B, A), and (D) corresponding to the worst level, with scores of 0 to 2; C level 3 to 5; B level of 6 to 8 (the two intermediate levels) and the most favorable level with score of 9 to 11. The interpretation of the results was as follows: limited capacity for attention to TB patients (Scores of 0 to 2), basic capacity for attention to TB patients (Scores of 3 to 5), reasonable capacity for attention to TB patients (Scores of 6 to 8) and great capacity for attention to TB patients (Scores of 9 to 11). Calculated on the basis of the arithmetic mean of the sum of the score of each level divided by the number of components.

The project was submitted to the Committee of ethics in research (CEP), the Federal University of Rio Grande do Norte (UFRN) which adopted its opinion approved by the protocol number: 456,332 and CAAE: 18675113.2.1001.5537. This study, respects the guidelines and regulatory norms for research involving humans, issued by the Resolution No. 466, from 2012, the National Health Council.

From the variables of the instrument data was organized, categorized and coded. Data analysis was conducted using the Statistical Package for Social Sciences (SPSS) version 22.0. Descriptive statistics was used, and the presentation of data through tables.

## RESULTS

### Characterization of health professionals

For the characterization of health professionals were adopted the following variables: Professional category, place of performance of the health care professional, time and service time who carries out the function. According to the results, 35% (n = 35) of health professionals were nurses, 22% (n = 22) nursing technicians 9% (n = 9) doctors and 34% (n = 34) community health Agents (ACS). Among the interviews conducted 80% (n = 80) were answered by professionals of Family Health Units (USF), 18% (n = 18) of Basic Health Units (UBS) and only 2% (n = 2) of mixed units.

In relation to the length of service 7% (n = 7) worked in the health unit for less than 1 year, 23% (n = 23) of 1 to 5 years, 29% (n = 29) from 6 to 10 years and 41% (n = 41) for over 10 years. With respect to the time performing the function, 3% (n = 3) of respondents is less than 1 year in the exercise of the profession, 4% (n = 4) are between 5 to 1 year, 14% (n = 14) from 6 to 10 years and 79% (n = 79) for over 10 years. These data corroborate with a study conducted in Mirim Ceará /RN by Pinto, Mark and Villa (2010) in which shows that most working professionals in the APS, are in service for over 10 years.<sup>12</sup>

A study in Portugal also pointed out that in relation to the time of operation in APS there was a predominance of

professionals between 1 to 11 years of experience, although with significant presence of those with more than 12 years. What gives the professional an increasingly comprehensive look at the user in the health system.<sup>13</sup>

## Classification of the assistance provided by professionals for people with tuberculosis

56% (n = 56) of the study participant's professionals develop a reasonable assistance, and only 21% (n = 21) provides great assistance to patients with TB. According to table 1.

It is observed that health actions developed during the process of TB patient assistance still occur discontinuously, with little integration and coordination between professionals and attention levels, highlighting the predominance of a fragmented health model, the care and treatment of acute cases. It is important that assistance developed APS services occur so articulate and integrated enabling the continued attention to the patient in the health care system, seeking to ensure adhesion and long term treatment.<sup>14</sup>

**Table 1:** classification of the assistance provided by professionals for people with tuberculosis according to ability - Natal-Rio Grande do Norte - 2014.

Assistance for the care and treatment of tuberculosis		
Ability	n	%
BASIC	23	23
REASONABLE	56	56
GREAT	21	21
<b>TOTAL</b>	<b>100</b>	<b>100</b>

Source: data sourced from research, 2014.

## Classification of components of self-care dimension according to the ability

According to 56% (n = 56) of professional support for TB patients was regarded as great; other 44% (n = 44) reported to be great the support that is given to the bearer of TB; While 55% (n = 55) classified the reception provided as reasonable and 35% (n = 35) rated the participation of professionals in the process of behavioral changes to the TB carrier as reasonable. According to the table 2.

**Table 2:** classification of components of self-care dimension according to the ability Natal - Rio Grande do Norte - 2014.

Components	Ability LIMITED		Ability BASIC		Ability Reasonable		Ability GREAT		TOTAL	
	n	%	n	%	n	%	n	%	n	%
Records/professional support	1	1	28	28	15	15	56	56	100	100
Support (link and health education)	16	16	14	14	26	26	44	44	100	100
Greeting	3	3	26	26	55	55	16	16	100	100
Changes in behavior	9	9	28	28	35	35	28	28	100	100

Source: Data sourced from research, 2014.

Most health professionals give the necessary support to patients with TB of standardized way and articulated with the plan of care. And only 1% (n = 1) of the professionals mentioned limited support which features non-realization in the health unit.

It highlights the importance of the support received during the treatment by professionals in the health service with carriers of TB, as the records made according to your plan of care, because when they are well received there is a stimulus in the adhesion of therapeutic scheme. A study on the USF of Capão Redondo, located in the southern part of the municipality of Sao Paulo showed that the desire of patients in obtaining a cure for TB and regain health motivated the completion of treatment and self-care, leading to the adoption of healthy lifestyle habits, how to sleep well and have good food.<sup>15</sup>

Health education is an important tool for self-care and involvement among all health professionals and users.

Among the factors that involve self-care: the link, the host and the behavior. After the patient the diagnosis of TB to multidisciplinary health team has the function to guide them in relation to the beginning of the treatment and help them cope with the disease, especially those who find it difficult to take responsibility for the care of yourself.<sup>16</sup>

In relation to the support offered by health professionals to patients with TB, with regard to the link and the health education 44% (n = 44) of health professionals reported great capacity, what is on offer clinical, psychological and social conditions for people with TB, by trained professionals. And 14% (n = 14) reported basic capacity offered through educational activities.

The bond and the education in health are primordial elements for monitoring the treatment of TB by providing beyond the administration of medicines, the exchange of dialogue giving the bearer of TB more autonomy during the course of treatment. These features must be found in the



health care service, contributing to the improvement and continued treatment for the patient to feel more comfortable to expose opinions and anxieties when is welcomed by professionals.<sup>17</sup>

The link is the principle that governs the APS, being instrumental in the successful treatment of TB, and a structuring element in attention and in the control of TB, in which encompasses accountability, the completeness and the humanization. In addition to enabling the patient to understand the meaning of the care he provided and their co-responsibility in this process.<sup>18</sup>

In São José do Rio Preto, one of the priorities municipalities of the State of São Paulo for the control of TB, was developed a study that showed that bond formation is higher when TB patients are serviced by the same professional, which leads to an approach between the patient and the professional, allowing the bond between them.<sup>19</sup>

With respect to health education, this is a tool of popular participation through a set of knowledge and practices aimed at the prevention of diseases and health promotion. Performed by trained and committed professionals, in order to contribute in everyday life of the people, since understanding the constraints of the health-disease process will offer subsidies for adopting new habits and health.<sup>20</sup>

Different from the findings in this research, a study on health education to the TB control held in a city in the State of Paraíba with ESF professionals, showed that difficulties were encountered related to the actions of health education due to lack of interest of community participation, as well as the low professional qualification of the health teams coming to differentiate in this study. The guidance and disease prevention are important elements for strengthening health promotion and prioritizing actions of the ESF teams.<sup>21</sup>

In relation to hosting 55% (n = 55) of the professionals of the health units classified the welcoming of patients concerns with TB patients and their families as reasonable, being conducted and resolved on the Health Unit itself. And only 3% (n = 3) with limited capacity, what characterizes the non-realization of welcoming for the bearer of TB in the reception unit of APS.

It was identified in this study that there is no involvement with support groups and specialized professionals such as psychologists and social workers on the own health unit to accommodate the bearer of TB. The literature points out that despite the host is still in process of construction, professionals recognize that even extends links and improves the understanding of the needs of users. Is responsible for still involving a degree of affection from the verbal communication, valuing the individual with qualified listening for an actual effectivity of the holistic principle of care.<sup>22</sup>

Regarding interventions for change in the behavior of people with TB to stop drinking, smoking and drug using 35% (n = 35) of the professionals classified as reasonable which consists of referral to specialist centers. And 9% (n

= 9) with limited capacity, characterized as unavailability of interventions TB bearer .

With the beginning of treatment, there is also the difficulty of inserting behavioral changes with the carriers of TB that will contribute to promoting health. Despite the information about the disease, some individuals continue with lifestyles that can hamper treatment.<sup>23</sup>

For some, the access to care also requires a behavioral change (not drinking, avoiding stress, maintaining discipline in time to take the medications), this can be particularly difficult when the patient does not associate your treatment to your diagnosis, or the absence of bodily symptoms associated with the disease.<sup>16</sup>

The adherence of patients to the treatment of TB is related to the attention given by health professionals resulting in bond and in foster care. These are essential to the continuation of the treatment of the disease.

Behavior changes in the habits of life to better health not only the referral to specialist centers. It is necessary that health professionals seek in addition to the risk factors such as smoking, physical inactivity and drugs that can interfere with the progress of treatment and therefore in the quality of life of the patient. In this way should be the analysis of the entire social context, habits and the development of prevention and patient care.<sup>24</sup>

A study conducted in the State of Acre in Rio Branco revealed that the use of drugs or alcohol by carriers of TB was often been described by health professionals as an obstacle at the end of the treatment. Those who have this habit are considered by the service as problematic and predisposed to abandon treatment. They feel constrained in talking about their habits in front of a health professionals, because they think they will be repressed for this behavior and receive life lessons.<sup>25</sup>

Some behaviors such as using masks in the first two weeks of treatment on the part of patients can hinder the access, which contributes to them adopting behaviors of social isolation, in front of family and friends.<sup>15</sup>

In this way, one can see that the support and participation of the family have important relevance in combating the disease and can assist in treatment adherence, on changing habits, emotional comfort and progress of the treatment.

One of the limitations of the study, is the difference in the number of professionals per Professional category which prevents to make inference to the population by categories.

It should be noted that the completion of the interviews was only possible through a partnership with the Municipal Health Secretariat of Christmas from the provision of the list of survey professionals and the support of the health teams.

The study brings the experience of health professionals regarding self-care provided to patients with TB during the performance in the APS in the control of TB. For future studies would be interesting a systematic follow-up of the work of these professionals in the APS.

## CONCLUSION

The study has allowed to know how APS professionals perform self-care provided to TB patients and their families to fight the disease. Despite having been satisfactory in relation to the Constitution of the bond, it was observed that there is still a deficit in relation to the reception of this patient in the unit of health professionals. As to the possible changes in behavior and habits into your lifestyle. Health professionals along with the family of TB have a fundamental role in the success of the treatment. Thus, the need to meet the full form, addressing individual aspects, social and health services in order to strengthen the link between patient, professional and service.

Finally, it is necessary to other research focused on that theme, in order to identify and reflect on actions that can be undertaken for the promotion of integral attention to TB carrier.

## REFERENCES

1. World Health Organization (WHO). Global Tuberculosis Control: surveillance, planning, financing. WHO report 2010. Geneva; 2010.
2. Brasil. Ministério da Saúde. Tuberculose na atenção primária à saúde. Porto Alegre: Hospital Nossa Senhora da Conceição, 2011.
3. Paz LNF, Ohnishi MDO, Barbagelata CM, Bastos FA, Oliveira JAF, Parente IC. Efetividade do tratamento da tuberculose. *J Bras. Pneumol.* [Internet]. 2012 ago [acesso em 2014 set 09]; 38(4):503-10. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S1806-37132012000400013&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1806-37132012000400013&lng=en)
4. Moysés ST, Filho ADS, Moysés SJ. *Validação transcultural dos instrumentos ACIC e PACIC para avaliação da percepção das equipes e das pessoas usuárias sobre a atenção às condições crônicas. Laboratório de inovações no cuidado das condições crônicas na APS: a implantação do Modelo de Atenção às Condições Crônicas na UBS Alvorada em Curitiba, Paraná.* Brasília: Organização Pan-Americana da Saúde/ Conselho Nacional de Secretarias de Saúde; 2012: 80-101.
5. Baquedano IR, Santos MA, Teixeira CRS, Martins TA, Zanetti ML. Fatores relacionados ao autocuidado de pessoas com diabetes mellitus atendidas em Serviço de Urgência no México. *Rev. Esc. Enferm. USP* [Internet]. 2010 dez [acesso em 2014 mar 08]; 44(4):1017-23. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0080-62342010000400023&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0080-62342010000400023&lng=en)
6. Galvão MTRLS, Janeiro JMSV. O autocuidado em enfermagem: autogestão, automonitorização e gestão sintomática como conceitos relacionados. *REME rev min enferm* [Internet]. 2013 jan. Mar. [acesso em 2014 abr. 25]; 17(1):225-30. Disponível em: <http://pesquisa.bvsalud.org/portal/resource/pt/lil-684241>
7. Grillo MFF, Neumann CR, Scain SF, Rozeno RF, Gross JL, Leitão CB. Efeito de diferentes modalidades de educação para o autocuidado a pacientes com diabetes. *AMB rev. Assoc Med Bras.* [Internet]. 2013 ago [acesso em 2014 mai 29]; 59(4):400-05. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0104-42302013000400021&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-42302013000400021&lng=en)
8. Instituto Brasileiro de Geografia e Estatística – IBGE; 2013. [Acesso em 2014 fev. 16]. Disponível em: <http://www.cidades.ibge.gov.br/xtras/perfil.php?lang=&codmun=240810>
9. Secretaria Municipal de Saúde de Natal. Plano municipal de saúde: 2006-2009. Natal, RN, 2006. [acesso em 2014 fev. 15]. Disponível em: <https://www.natal.rn.gov.br/sms/paginas/File/SMS-PMS2006-2009.pdf>
10. Barbosa IR, Costa ICC. Aspectos epidemiológicos da tuberculose no município de Natal. *Rev. Enferm UFPI* [Internet]. 2013 abr-jun [acesso em 2014 set 09]; 2(2):14-20. Disponível em: <http://www.ojs.ufpi.br/index.php/reufpi/article/viewFile/987/pdf>
11. Departamento de vigilância à saúde. Setor de vigilância epidemiológica. Natal: Núcleo de agravos notificáveis, 2013.
12. Pinto ESG, Menezes RMP, Villa TCS. Situação de trabalho dos profissionais da Estratégia Saúde da Família em Ceará-Mirim. *Rev.esc. enferm USP* [Internet]. 2010 set [acesso em 2014 out 05]; 44(3):657-64. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S008062342010000300015&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S008062342010000300015&lng=en)
13. Souza MB, Rocha PM, Sá AB, Uchoa SAC. Trabalho em equipe na atenção primária: a experiência de Portugal. *Rev. Panam Salud Pública* [Internet]. 2013 mar [acesso em 2014 out 08]; 33(3):190-95. Disponível em: [http://www.scielosp.org/scielo.php?script=sci\\_arttext&pid=S102049892013000300005&lng=en](http://www.scielosp.org/scielo.php?script=sci_arttext&pid=S102049892013000300005&lng=en)
14. Assis EG, Beraldo AA, Monroe AA, Scatena LM, Gonzales RIC, Palha PF et al. A coordenação da assistência no controle da tuberculose. *Rev.esc. enferm USP* [Internet]. 2012 fev. [acesso em 2014 out 08]; 46(1):111-18. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S008062342012000100015&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S008062342012000100015&lng=en)
15. Hino P, Takahashi RF, Bertolozzi MR, Egry EY. As necessidades de saúde e vulnerabilidades de pessoas com tuberculose segundo as dimensões acesso, vínculo e adesão. *Rev.esc. enferm USP* [Internet]. 2011 dez [acesso em 2014 set 09]; 45(spe2):1656-60. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S008062342011000800003&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S008062342011000800003&lng=en)
16. Ferreira J, Engstrom E, Alves LC. Adesão ao tratamento da tuberculose pela população de baixa renda moradora de Manguinhos, Rio de Janeiro: as razões do im (provável). *Cad Saúde Coletiva* [Internet]. 2012 [acesso em 2013 set 13]; 20(2):211-16. Disponível em: <http://pesquisa.bvsalud.org/portal/resource/pt/lil-644853>
17. Brunello MEF, Cerqueira DF, Pinto IC, Arcênio RA, Gonzales RIC, Villa TCS et al. Vínculo doente-profissional de saúde na atenção a pacientes com tuberculose. *Acta paul enferm* [Internet]. 2009 [acesso em 2014 ago. 24]; 22(2):176-82. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0103-21002009000200010&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-21002009000200010&lng=en)
18. Figueiredo TMRM, Pinto ML, Cardoso MAA, Silva VA. Desempenho no estabelecimento do vínculo nos serviços de atenção à tuberculose. *Rev. Rene* [Internet]. 2011 [acesso em 2014 set 26]; 12(n.esp.):1028-35. Disponível em: <http://www.revistarene.ufc.br/revista/index.php/revista/article/view/332>
19. Ponce MAZ, Vendramini SHF, Santos MR, Santos M LSG, Scatena LM, Villa TCS. Vínculo profissional/doente no tratamento da tuberculose: desempenho da atenção básica em município do interior paulista. *Rev. latinoam enferm* [Internet]. 2011 out [acesso em 2014 ago 23]; 19(5):1222-29. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S010411692011000500021&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S010411692011000500021&lng=en)
20. Santos TMMG, Nogueira LT, Arcênio RA. Atuação de profissionais da Estratégia Saúde da Família no controle da tuberculose. *Acta paul enferm* [Internet]. 2012 [acesso em 2014 ago 23]; 25(6):954-61. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S010321002012000600020&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S010321002012000600020&lng=en)
21. Sá LD, Gomes ALC, Carmo JB, Souza KJM, Palha PF, Alves RS et al. Educação em saúde no controle da tuberculose: perspectiva de profissionais da estratégia Saúde da Família. *Rev. eletrônica enferm* [Internet]. 2013 mar [acesso em 2014 set 21]; 15(1):103-11. Disponível em: <http://www.revistas.ufg.br/index.php/fen/article/view/15246>
22. Lopes GVDO, Menezes TMO, Miranda AC, Araújo KL, Guimarães ELP. Acolhimento: quando o usuário bate à porta. *Rev.bras. enferm* [Internet]. 2014 fev [acesso em 2014 set 10]; 67(1):104-110. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S003471672014000100104&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S003471672014000100104&lng=en)
23. Manzini FC, Simonetti JP. Consulta de enfermagem aplicada a clientes portadores de hipertensão arterial: uso da teoria do autocuidado de orem. *Rev. latinoam enferm* [Internet]. 2009 fev. [acesso em 2014 mar 08]; 17(1):113-19. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S010411692009000100018&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S010411692009000100018&lng=en)
24. Nogueira JA, Trigueiro DRSG, Sá LD, Silva CA, Oliveira LCS, Villa TCS et al. Enfoque familiar e orientação para a comunidade no controle da tuberculose. *Rev.bras. epidemiol* [Internet]. 2011 jun. [acesso em 2014 ago. 24]; 14(2):207-16. Disponível em: [http://www.scielosp.org/scielo.php?script=sci\\_arttext&pid=S1415790X2011000200003&lng=pt](http://www.scielosp.org/scielo.php?script=sci_arttext&pid=S1415790X2011000200003&lng=pt)
25. Rocha DS, Adorno RCF. Abandono ou descontinuidade do tratamento da tuberculose em Rio Branco, Acre. *Saúde soc.* [Internet]. 2012 mar [acesso em 2014 set 26]; 21(1):232-45. Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S010412902012000100022&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S010412902012000100022&lng=en)

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